We know nothing about the history of the first settlement of this island group. We only know that the inhabitants were very warlike, that they destroyed each other in one battle after another, and that the island was resettled at a later time by natives from Ifaluk. This was during the reign of the high chief Thamolrás, and so he is considered to be the first chief. This story gives some information about his epoch:

War between Faraulip and Pix

Nargetumár, who was a native of Pix, had insulted the people of Faraulip, and they threatened him dreadfully when he left their island. So when he got home, he said to his men: "Get ready! Tomorrow the Faraulip islanders will come to fight us!" Accordingly, the Pix inhabitants made spears for themselves, and the Faraulip men also got ready, but neither side had the courage to start the battle. One night the Faraulip men went fishing, and only a small group remained with the women and children in the village. Then the Pix natives made a surprise attack on them, and killed a large number of people. At dawn the canoes returned and found the massacre. Then the Pix men suddenly overwhelmed the defenseless fishermen in their boats, and only a few managed to escape in the open sea or in the thicket. The Pix islanders remained for a time on Faraulip, and then departed.

At that time a Yap native was staying on Faraulip, so the few survivors went to him, and inquired if he would be willing to help them against Pix. He agreed, and performed

a magic spell; then a high sea (probably a typhoon) came and destroyed many houses on Pix; and many people perished too, so that only twenty were left. But the ocean wreaked havoc on Faraulip too, and all the inhabitants died save one, who had fled into the jungle. The Yap islander died shortly after his conjuration.

The one Faraulip survivor, whose name was Uērlipār, went to the reef, caught 20 oméi fish in baskets, laid them in a ūx basket, and took it to Pix. First he called for the chief. An old man crawled up to him, leaning on canes. "Here, do you want the fish? Come and get it!", said the Faraulip man. The old chief [194] came up, and then the fisherman took him into the canoe and cracked his skull open with the fish club. Then he summoned all of the people in turn, and killed them. Finally he was alone; he did not like that, and so he went to Unaneí (Oleai), and got married; then he returned home to Faraulip with his wife. But upon his arrival, he found a canoe from Ifaluk; the crew had taken possession of the island, and they forbade him to land. So he went to Pix, and settled there. For this reason many of the cultural advantages that are found on Faraulip did not originate there, but came from Ifaluk.

Under the reign of chief Ragetéx a great typhoon struck Faraulip, and it did an enormous amount of damage. It struck Oleai and Aurepik too, but did not do so much harm. This storm killed many people, and destroyed all the palm trees, so the natives did not have anything to eat. Fortunately a canoe appeared from Oleai, it took the survivors

back to that island, and saved them from the worst period of the famine. Then when the trees and plants had started to grow again, the people returned home. Shortly after this, a second typhoon blew across the island; it tore down some huts and a few palms, but did not do any greater damage.

3: Thilenius and Hellwig--250-251 (1909-10) 1927 Woleaians
116, 731, 261 Woleai

Hellwig went over to the island of Wolea, the western part of which he visited first. The devastation caused by the typhoon (March 28, 1907) was to be seen everywhere.

....Several varieties of taro and sweet potatoes in well-kept fields showed that agriculture and food conditions had improved. Coconuts were scarce and swine were lacking completely so that the population will have to live on meager rations for years to come. As on Mogomog and Aurepik, here, too, the menu was made complete by a series of forest plants....several chickens had survived the typhoon flood, and their offsprings had increased considerably since....Hellwig was told...that the typhoon had not struck at night, otherwise the entire population would have been killed. When the waves had grown higher and higher and when the flood had become imminent, ropes had been fastened around the strongest trees, and the inhabitants had tried to cling to them.... Of the 6-700 inhabitants of the island group about 200 were said to have died. There was loud wailing, and it did not cease during the subsequent period of famine, when the fruits of the fields, with difficulties recovered from the mud- and stone-covered ground, were soon eaten up, and when the fish supply was low and had to be eaten raw, since the fishing implements had been lost and there was no dry wood around to make fire with. Even today when, on occasions, the women again become conscious of the consequences of the catastrophe, [251] a general loud lamenting sets in.

3: Thilenius and Hellwig--260 (1909-10) 1927 Woleaians
116, 161, 167, 342, 731 Ifalik

Feladjik has 109 inhabitants, the second island, Falāláp, 99, while Elă, the third island of the atoll, was uninhabited. In 1904 the population figure was still as high as 281. During the last typhoon (March 27, 28th, 1907) 35 persons perished.... The atoll was settled from Yap... Only Wólea, Lámutrik... and Faraûlip had been settled from Ífaluk .... Fraûlip had been depopulated by civil wars, Faladjik and Felāláp are inhabited only to the north; the farmsteads are dispersed at intervals along the coast. House construction is little developed.

4: Krämer--1
116, 161, 167, 731

(1909) 1937

Woleaians
Lamotrek

[MR: From the Südsee-Handbuch, p. 34]: Natives: Lamutrik has a population of no more than 200, who may be looked upon as new arrivals. Sixty years ago the tidal wave of a typhoon had in part destroyed the population and in part had forced it to emigrate to Truk, Jap, and Saipan; later on some of them returned to their home islands.

4: Krämer--3 (1909) 1937 Woleaians
116, 161, 731 Elato

[MR: From the Südsee-Handbuch, p. 34]: In 1903 the population [MR: of Elato] amounted to 90 heads; probably it has decreased even further through the typhoon of March 28, 1907.

4: Krämer--183 (1909) 1937 Woleaians
116, 165, 731 Woleai

During the typhoon at the end of March 1907 Raur was destroyed by a tidal wave. No more than two people escaped this catastrophe.

4: Krämer--185
116, 165, 731

(1909) 1937

Woleaians
Woleai

In 1904 the population of the Woleai group numbered 661. The main reason given for a lowering of the population figure is dysentery, due to the consumption of sour toddy, and elephantiasis and paralysis. The serious typhoon of March 28, 1907 devastated the eastern islands of the group and took the lives of 200 people. It is probable that the population has decreased and now is little more than 450.

4: Krämer--185-186 (1909) 1937 Woleaians 1-8
116, 132, 175, 731 Woleai

Tagaulap. About fifteen to twenty years ago at the time of the southwestern monsoon a tidal wave tore away the entire southern end of the island of Tagaulap with all its houses, coconut palms and breadfruit trees but without the loss of human life. Today the tip of the island is completely covered by sand and only the bare skeletons of dead trees rise above the dry sand. [186]

During the typhoon at the end of March 1907 Raur was destroyed by a tidal wave. No more than two people escaped this catastrophe. The former island at the present time is a reef covered with a sandbank. During the typhoon, the government schooner "Ponape" happened to lie at anchor south of Flalap. When the winds were northeasterly to westnortheasterly she lost both her anchors and with the tidal wave that had destroyed Raur, she was carried southwest across the reefs and out to sea.

4: Krämer--196-200 (1909) 1937 Woleaians-1
116, 175, 731 Woleai

Typhoon 1907 in the Western Carolines
The devastation of the Oleai island group (with map)*

On March 27 the government schooner "Ponape" returned to Oleai from a voyage to Ifaluk... The weather had been fine for weeks; but now winds with thunder squalls arose so that the distance of 35 nautical miles took 42 hours. The difficult entrance to Ifaluk was successful; previously the ships dropped anchor outside the lagoon in 9-16 fathoms of water. The return voyage took 5 1/2 hours. (On March 27). The voyage to Yap was to be continued on the following day. In order to give medical attention to the islanders, some passengers of the ship went ashore in the afternoon. The evening was calm and the moon shone brightly and splendidly (one day before the full moon). Early on the 28th of March several strong thunderstorms came from the east and north and strong rain squalls were interrupted by calms. Striking was the current from east and south which became steadily stronger. Early in the morning many frigate birds could be observed above the atoll flying about aimlessly although normally they are seldom seen around the land. At noon, in the lagoon, high breakers hit the sandy beach. The barometer took a dive and the "Ponape" remained in port, because the captain thought it would be better if the ship were to await the threatening typhoon in the inland water. Born was

*The illustrations that go with it are found in Krämer, 1927: Die Entstehung und Besiedlung der Koralleninseln, photograph IV.

asked to stay on board but he could no longer manage to take his luggage through [197] the strong surf. At 2:30 in the afternoon the waves around the outer reef and the lagoon were extraordinarily high; the "Ponape" chose another anchorage. As Born was trying to go ashore there arose a sudden squall from NNE so that the canoe was flooded. Born had great trouble trying to reach the beach; his house on the island had been abandoned by that time, because high waves had passed over the sand dunes 80-1000 meters long and had advanced to the house. Within the next two hours and a half this dune on the eastern tip (SE) was washed away completely so that a wide passage (previously narrow) resulted between the main island of Flalap and Paliau; through it high waters poured into the lagoon where they met with the breakers from the SW, so that water surged up to amazing heights.

At five o'clock the waves became high again, after the wind had calmed for some time, and Born had been able to reach the house; he was sitting on the porch when the water reached him there and carried him several paces away...

At 5:15 Born sent a note to the captain of the "Ponape" with the advice, ... of changing the anchorage of the ship once more and moving it to a more protected position at the N-W tip of the island near the island of Ifang. The answer he received was that the barometer was steady and that the wind was expected to die down but that the waves would run even higher than before.

Shortly before 6 o'clock Born was forced to leave the station; the buildings had already collapsed. He retired to the neighboring village of Leuleperik where he took up quarters in a new native house approximately 800-1000 meters from the northeast shore.

Late in the evening the NE wind gathered momentum and branches broke off trees. From one o'clock in the morning on, it was so violent that the noise sounded like the fire of small guns and was only interrupted by the somewhat different sound of cracking tree trunks. But both were hardly audible through the roaring of the wind and the breakers. But the houses were yet able to withstand the storm of the night.

At 5 o'clock in the morning the news came that the water had reached the nearby village and that the house in which Born and Villacon were staying was surrounded by water. The water rose so rapidly that it was hardly possible to gather the most important things and to take them to the Japanese station in the village of Jaur, located at the widest part of the island. The path was passable only with difficulty; but finally it could be managed without accident. From Jaur one can overlook the lagoon, where the "Ponape" was no longer visible. On the horizon in the west strong sheet lightning could be observed. The surf in the lagoon reached the very houses of the village. A stay in the station seemed dangerous, and everyone retired to the western canoe-house where all the natives of the island had assembled. They were completely confused and overwhelmed by the happenings and recalled an old oracle that at some time in the future their island would be washed away. They thought that the time had come. Soon

this group was joined by the Japanese who had to flee when their station was washed away by the high waves. But by now even the present shelter was no longer safe, and everybody moved on to the northwestern tip of the island near Ifang. This was the last escape...In a house on a low hill [198] large numbers of screaming and weeping natives had sought shelter. The lamentations increased when a man announced that presently the water was also coming from NNE. Born climbed a palm tree and from this position was able to observe the seas moving through the woods like white cats. When he came down from his lookout, the water stood up to his hips. Everyone tried to pick up planks and ropes and went down to the shore of the lagoon. Fortunately the water rose slowly and the wind became weaker. Born noticed a gigantic breadfruit tree which had been uprooted; its roots rose several meters into the air, and Born and several others climbed on it. They had barely reached their new position when the typhoon started to rage from ESE with an indescribable velocity. It seemed as if a thousand trains were rushing by. It was 9 o'clock in the morning and the wind continued in this manner until three in the afternoon. The air was so full of water and sand that one could only see a few steps ahead. Then the wind calmed down somewhat; for some moments the sun actually broke through and it became possible to recognize one's surroundings: fairly close to the shore of the lagoon at the NW corner of the island.

The water had fallen somewhat and the destruction could be viewed; the trees were

piled to a height of several meters. There was no sign of houses and human beings other than the remnants of the large canoe-houses visible on the beach. Moving through water that reached his hips, Born approached the village of Jaur and on his way he observed two youths, painted red, who were carrying a pig inland. Following them, he arrived at the center of the island where a large number of natives had come together and where all spent the first night. Apparently no one had come over from Oleai, but soon bad news came from the SE.

On Saturday, March 30, early in the morning, the wind had calmed down considerably but in the lagoon the waters continued to surge and boil high; there was no trace of the "Ponape". Some natives said that they had last seen her lights on the morning of the 29th, but by now she was considered lost. A walk along the beach proved the terrible havoc wrought by the typhoon; there was nothing left of the island of Raur except a sandbank with a few solitary palm trees. On the beach of Leuleperik, the body of a 5-year old boy was washed ashore. It soon became known that there were no more than two survivors from Raur, a man and a woman; that meant that 130 had lost their lives. Only 9 had been on other islands when the typhoon hit. On Paliau about 50 of the 90 natives had been victims of the storm. On Tagaulap a woman had been killed when a house collapsed. Four women of Saliap had been on Raur and 10 people from Utagal and 5 from Falalis so that the total loss of lives must have been about 200. The doctor was unable to give much aid to the numerous injured because all medicines and instruments had been

washed away by the waves. In the course of Saturday and Sunday, many bodies were washed ashore, most of them mutilated in a cruel fashion. Miraculous escapes were also recorded; several natives of Paliau drifted to Saliap, and four from Raur to Utagal; two children--a boy [199] of 5 and a girl of 8--landed safely on Marijong.

The survivors of Paliau and Raur reported the following: on the evening of March 28, some of the experienced men judged from the roar of the breakers that a tidal wave was moving in the direction of their island. Some preparations were made, e.g., many women and children were taken up high on breadfruit trees and were tied on. During the following night, the water on the island reached a height of 1 1/2 meters. But it was not until the following morning, the morning of March 29th at 8 o'clock, that the tidal wave really came. One could see it approach from the tops of the highest breadfruit trees; it appeared to be about 40 meters high and like a dark cloud with deafening noise it broke over the island like a gigantic stream of water. Everything withstood this onrush, but soon a second, even higher tidal wave swept over the island and carried along everything, trees, houses, and human beings. The lagoon was turned into a boiling kettle in which drifting tree trunks and boards ground up everything.

The entire island of Raur, with its total length of 1700 meters was washed away while a new island appeared between Falális and Motogosóu in the south; this island seems to have existed once in the past and was called Met (see map 4) [VMM: see 4: Krämer 184].

The narrow shallow entrance between Paliau and the main island (Figure 80) [VMM: see source] was greatly widened and deepened. The reef between the two islands had cracked like a marble block. And the ground of Paliau and Raur looked as if it had burst. On the outer reef of Raur through which the tidal wave had broken, three longish coral debris aggradations stood out like islets. The entire fundamental formation was as smooth as the top of a table and only some coral pebbles were scattered over it. The tidal wave must have come from ENE.

The mail streamer was not due until about May 25 and threatening starvation was a big problem.* The coconuts were picked and divers tried to salvage the taro of the fields which stood under 2-3 meters of water. The chiefs were in charge of the distribution of foodstuffs and did an excellent job of it.

The trading station O'Keefe-Yap was used to store the extra food. The water tank, with a capacity of 3 1/2 cubic meters had been carried off 100 meters in spite of the fact that it had been [200] cemented in. The scattered goods and food supplies could be saved in part. Most of them were distributed among the natives by the government physician and at government cost.

A great drought followed so that when the "Germania" arrived on April 11, she came as a saviour. The steamer also brought the news that the "Ponape" had arrived safely

*I learned that for that reason typhoons are also known as Lángeta "no food."

on Saipan on April 4.

Captain Martens reports that on Friday, March 29, from 7:30 P.M. the typhoon was raging. One squall followed upon another. No land was visible in spite of the full moon. [ER: The experiences of the ship during these days are described in the text, but are omitted here.] Since the current was definitely and violently NW it was impossible to take a course towards Yap and for that reason the ships sailed in the direction of Guam or Saipan; the latter was reached on April 4.

The destruction wrought by the typhoon was so considerable that at the instigation of the German government a large number of coconut palms were planted:1000 on Volea, 500 on Máriong, 500 on Tagaulap, 500 on Vótagai, and 1500 on Falális; on Raur which now belongs to Daruélimog as many as 4000 trees were planted and on Paliau 2000. SS Natuna picked up many people after the typhoon, 100 on Volea, 7 on Mariong, 8 on Tagulap, 1 on Soluap, and 110 on Falális. About 200 were taken to Saipan.

The soldier and supervisor Goru.....--he could only write his name--asked me to give a message to the government on Yap and to inform it that he wanted to stay on Volea. Agupelior sent 20 woven mats as a gift with the information that now there was plenty of food on Oleai, and that the natives of that island who had been transplanted could well return. Goru saw to it that 20,000 new coconut palms were planted after the typhoon. The breadfruit trees did not bear fruit for a long time, and the taro swamps were covered by a salt crust.

6: Senfft--54
116, 162, 731

(no date) 1905

Woleaians
Lamotrek

The total population of Lamutrik is almost exactly 200, and the number of men and women is approximately the same. A very old man from Lamutrik told me that the island was uninhabited until about 60 years ago. A typhoon and a strong tidal wave had destroyed almost all the inhabitants as well as the plantations. A few of the survivors went to Oleai to get canoes, and the others used these to emigrate to Yap, Saipan, Truk, and other islands with which they were familiar. Some of them later returned, after the vegetation had been renewed.

9: Senfft--13 (1903) 1904 Woleaians
116, 167, 731 Lamotrek

This group of islands had formerly had a denser population; a typhoon together with a flood had destroyed almost everything about 60 years ago. A few men who had gone on the six remaining canoes to the Oleai Group at a distance of 150 nautical miles had brought a number of vessels on which the whole population emigrated to the Marianas, Truk, Yap, and other islands. Only after many years part of the population returned.

14: Born et al--567-570 (1907) 1907 Woleaians -1-6
116, 132, 731 Woleai

Wednesday evening [MR: March 27, 1907] passed quietly with almost complete calm and beautiful moonlight. Early the next day several sharp thunderstorms passed over the islands from north and east, and a strong wind with rain squalls set in by fits and starts. The wind let up again and again after a short time, and then there was almost complete calm. From morning on a striking phenomenon was the ever stronger surf from the east and south, which had no relationship to the strength of the wind. Likewise, there appeared early in the morning numerous huge frigate birds, which hovered aimlessly back and forth over the island. I had not noticed these birds in Oleai before. In the usually quiet lagoon there was already a heavy sea at noon, rolling up on the sandy shore in mighty breakers. The first officer of the "Ponape" explained this phenomenon to me as the beginning of a spring-tide, which might be expected the next night (full moon). Towards one o'clock P.M. I went aboard the "Ponape" to consult with the captain about the weather. He told me that under the circumstances a departure that day was not to be considered, the barometer was falling sharply; there was the possibility of an approaching typhoon. He further declared that in such an event he would try to hold fast as long as possible in the lagoon. Finally, he asked me to stay on board because I would be safer than on land. However, considering the impossibility of bringing my bulky baggage on board now with the constantly heavier sea, I preferred to go ashore again.

In spite of the fact that astonishingly there was almost no wind, there was, [568] when I left the ship at about 2:30 P.M., a fearful sea, both on the outer reef and in the lagoon so that the "Ponape" had to change her anchoring place. Shortly after I left the ship a strong rain squall suddenly came blustering from the north-northeast, which struck the canoe I was in violently so that we almost sank. Summoning all their strength, the natives succeeded in holding the canoe and bringing it to land. Here I found my house already evacuated for during my absence powerful waves had come up over the 80 to 100 meter long dunes as far as the house. In the course of the next two and a half hours this whole dune, the eastern point of the island of Oleai, was washed away; there was now a wide passage between the islands of Oleai and Talian, and through this the waves coming over the outer reef from the northeast crashed wildly into the lagoon, where they met the equally heavy surf from the southwest so that the waves towered very high. At 5 o'clock, while I sat writing on the veranda, a heavy sea with slight wind again broke over the reef and, striking towards my house, it threw me several meters away through the splintered veranda railing. My left thigh was severely bruised by falling beams, which made walking very difficult for me and on the next day would have been almost disastrous. At 5:15 I sent a note to the captain of the "Ponape," in which I transmitted to him the advice of a Spaniard who was with me to move the anchorage of the "Ponape" near the village of Isang, under the protection of the northwestern point of Oleai. I thereupon received a note saying that the barometer was standing still and abating of the

wind was to be expected, but that on the other hand the surf would still increase. Shortly before 6 o'clock I had to abandon the already half demolished station; I moved back into the adjacent village of Leuleperik, where I took quarters in a recently finished finely built native house. Late in the evening the wind from the north-northeast began to grow still stronger so that branches of trees were already being broken off. From 1 A.M. on one heard through the whistling of the wind the constant snapping of branches like musketry fire and the crashing of huge falling trees like the thunder of cannon, above it all rose the thundering noise of the surf, but the houses stood firm through the whole night. Towards 5 o'clock we (the Spanish trader Villaçon and I) were awakened by the watch we had posted with the news that the waves were already striking in the village of Leuleperik and that there was already water around our lodging. Leuleperik is about 800 to 1,000 meters away from the northeast shore. The water rose so fast that we scarcely had time to give the most necessary instructions for saving the luggage. We hurried to the Japanese station, which is in the village of Jaur, at the widest part of the island, and in the middle of it. The way was already blocked by fallen coconut palms and other trees lying in all directions, in some places forming real barricades. In spite of the coconuts, branches and trees whistling down to the right and left of us, we reached the Japanese station without accident, and had there an open view of the lagoon to the south. The schooner "Ponape" was not to be seen. Glaring lightning flashed on the horizon in the west. The surf in the lagoon was already beating against the houses of the village. We

soon left the Japanese station and betook ourselves to the most westerly canoe house of the village of Jaur, where a large part of the inhabitants of the island had gathered. The people had completely lost their heads. Like birds in a cage unable to find their way out, they ran aimlessly back and forth, anxiously listening to the roar of the surf. No efforts to encourage or console them did any good. All believed that the sinking of the islands had come and that the old prophecy would now be fulfilled that Oleai would one day be washed away by the sea. When the sea began to come further and further inland from the lagoon, we had to abandon this place, too. The Japanese traders appeared and reported that a wave coming from the interior of the island had washed away their trading station in a moment. So we had to withdraw into the interior of the northwestern point of Ifang. That was our last recourse. If the sea reached this part of the island too we were lost. Here there stood a house on a little knoll in which a large crowd of screaming, weeping natives had taken refuge. Some women were singing death laments in their distress. When a man suddenly announced that the sea was now coming also from the northeast out of the bush, the confusion reached its climax. I climbed a broken down coconut palm and saw the waves, like white cats, leaping through the woods from the northeast. When I came down from the tree the water was up to my hips. We provided ourselves with planks of wood and strong [570] ropes and turned again to the lagoon side of the island. The water was fortunately rising slowly; the wind was weaker. Then we saw a mighty breadfruit tree which had been wrenched from the ground with all its

roots. We climbed up on these roots, which stood several meters high, and found ourselves relatively secure there. Scarcely had we found this place of refuge (it must have been about 9 in the morning) when the real typhoon set in from the east-southeast. It is impossible to describe the strength of this wind. It was as if a thousand express trains were racing close by our tree. The air was so full of rain and sea spray, mixed with sand, that is was impossible to see to a distance of even a few meters. Thus the storm raged uninterrupted until towards 3 in the afternoon, coming from east-southeast to southeast.

At this time it calmed a little. The sun even broke through, though veiled, for a few minutes, and it was now possible to orient ourselves. It turned out that we were quite close to the shore of the lagoon in the northwestern corner of the island. The water had fallen. Around us there stretched a wide desolate waste, the ground was covered meters high with fallen trees. Only now and then, where a blooming, delightful garden had been, did the bare stump of a breadfruit tree and some withered palms project. Far and wide there was no trace of human habitation. Only a few disordered heaps of ruins marked the places where the great canoe houses, filled with the pride of the natives, the artful high-sea canoes, fishing wier baskets and nets, had stood. There was no human being to be seen. When we approached the village of Jaur, we found the water there meter-high. Suddenly we saw two fantastic figures, youths, rubbed bright red all over their bodies, carrying a pig. We followed them and wading in water up to our hips we reached,

after difficult climbing stretches, the place in about the center of the island where the natives had already partly gathered again. It turned out that by good fortune none of the inhabitants of the island of Oleai had perished. A bivouac was quickly put up, huts constructed of bush work, and a fire lit. In this bivouac we spent the first night of pouring rain.

On Saturday, March 30, in the morning, the wind had let up considerably. We went to the shore and looked around. The sea was still wildly whirling and seething in the lagoon; there was no trace of the schooner "Ponape." A walk along the shore of the island showed us everywhere the same ghastly devastation. The islands of Paliau and Raur seemed to have suffered especially badly. At the place where the lovely island of Raur had been opposite Oleai, only a long, white sandbank with a few palms and tree stumps was to be seen. On the beach at Leuleperik we found the first victim of the catastrophe, the body of a boy about 5 years old....

14: Born et al--570
116, 731

(1907) 1907

Woleaians
Woleai

When we approached the village of Jaur [MR: after the typhoon of March 1907 had passed], we found the water there meter-high. Suddenly we saw two fantastic figures, youths, rubbed bright red all over their bodies, carrying a pig. We followed them and wading in water up to our hips we reached, after difficult climbing stretches, the place in about the center of the island where the natives had already partly gathered again. It turned out that by good fortune none of the inhabitants of the island of Oleai had perished. A bivouac was quickly put up, huts constructed of bush work, and a fire lit. In this bivouac we spent the first night of pouring rain.

14: Born et al--570-571 (1907) 1907 Woleaians
116, 731 Woleai

When we returned to the camp [MR: after surveying the damage caused by the typhoon, March, 1907] the sound of loud crying and lamenting met our ears, not to cease all day. The first reports of tragedy had come in, and more and more were added. Only two inhabitants of the island of Raur had survived, a man and a woman. The loss of human life here came to a hundred and thirty. Nine inhabitants of the island had been on other islands during the typhoon, and had thus been saved. On Paliau fifty out of ninety inhabitants had perished, among them the able military policeman Jeuloch, who had drowned with his whole family in the attempt to save his wife and child. On Tageulap a woman had been killed by a falling house. Four women from the island of Saliap, who had been on Raur during the typhoon, had perished, 10 inhabitants of Utagal, five of Falalis, so that the total loss of human life came to two hundred. The number of injured was very great; but fortunately most of the wounds were not serious. I could give no assistance even to the slightly wounded since all my equipment of medicines and bandages as well as instruments, had been [571] lost. Throughout Saturday and on Easter Sunday the sea washed ashore many corpses, often horribly disfigured. Only with difficulty could the natives be persuaded to bury them. I should like to mention a few strange rescues; for instance, two children, a boy of five and a girl of eight, swam across the lagoon in the typhoon sea a knot and a half to Marijong. Several natives from Paliau were driven to Saliap, four from Raur to Utagal 4-1/2 knots away, two women and two men. The number thus saved was twelve.

14: Born et al--571
116, 132, 731

(1907) 1907

Woleaians
Woleai

The accounts of those saved from Raur and Paliau unanimously gave the following picture of the events on those islands: As early as the evening of March 28, experienced people concluded from the peculiar roar of the surf that a tidal wave was approaching. So all precautions were taken to save the women and children, and they were fastened with ropes in the branches of breadfruit trees. On March 29, towards 8 in the morning, after the water had risen a meter and a half high on the island during the night, a dark cloud appeared with a terrifying whistling noise over the tops of the highest breadfruit trees, thus over 40 meters high: the tidal wave. It broke like a gigantic jet of water in the middle of the islands and poured with a terrific flood into the lagoon. However, this first tidal wave did not tear away the tightly bound people; but directly after the first came a second and still higher wave, which swept away all trees, houses and people. The lagoon at this moment was a great whirling eddy, into which the trees full of men were torn. Those who did not drown were crushed by the trees in the surf on the reef ledges.

14: Born et al--571-572 (1907) 1907 Woleaians
116, 731 Woleai

The first concern after the typhoon [MR: March, 1907] was to collect the survivors of the completely destroyed islands of Raur and Paliau on Oleai in a joint bivouac. Here there prevailed admirable order and discipline among the natives so that in this respect no measures had to be taken. I want here to call attention to the fact that the natives most willingly complied with all my directions and that in the fourteen difficult days after the typhoon there was no case of disobedience or other disturbance.

The worry about a famine hung over us like a threatening spectre; it was so much the worse since, because of our uncertainty about the fate of the "Ponape," we had to expect to be without help until May 25 or 26 (that is, three to four days after the arrival in Jap of the Reich mail steamer "Germania" from Hongkong. So we immediately began collecting the masses of coconuts which were lying about; the taro which was still usable was brought from the fields, in which process the women had to dive to fish out the roots. Even days after the typhoon the water was two and a half to three meters deep in the large taro field on Oleai. All usable provisions were brought to special [572] huts and put in charge of the chiefs; they distributed the necessary rations several times daily to every individual, men, women and children.

14: Born et al--572
116, 731

(1907) 1907

Woleaians
Woleai

While the people were all so busy gathering together the food, I set about to salvage the extensive stocks of the O'Keefe firm, which maintained a trading station on the island of Marijong. The station itself was completely levelled to the ground...By good fortune we succeeded in saving a large part of the stock, above all most of the provisions, so that we had enough food for six to eight weeks. The rice damaged by sea water was washed, then dried in the sun, and had to be eaten, in spite of the danger of beri-beri.

We made the ruins of the trading station into a raft on which we went over to Oleai, where we quickly put together a house in Isang. I took possession of a large part of the stock of goods and all the provisions, on account, for the district office, and distributed them as needed to the inhabitants of the worst damaged islands of Falalis, Raur, and Paliau, things such as covers, loin cloths, hatchets, knives, cooking pots. I also gave as much as possible of the indispensable tobacco to the unfortunate people.

14: Born et al--572
116. 731

(1907) 1907

Woleaians
Woleai

An additional hard affliction was the dryness which set in after the typhoon. No rain fell up until the arrival of the "Germania" on April 11. The sun burned down pitilessly day after day on the ravaged islands. So we greeted the Reich mail steamer "Germania" which arrived unexpectedly on April 11 from Saipan, with large stores of provisions, as a true rescuer in distress. It also brought us the very cheering news that the "Ponape" had arrived safely in Saipan on April 4, after a very dangerous trip.

14: Born et al--572-573 (1907) 1907 Woleaians-13
116, 502, 731 Woleai

We [MR: Captain Martens] reached Oleai again on the afternoon of March 27, 1907 and returned to the same anchorage....From...[MR: about 3 o'clock] sea watch was kept because the weather did not look good. At 5:15 we dropped the second anchor. A strong swell and sea without wind came up in the lagoon; trees and parts of houses were driven by the ship from the corners of the island, torn down by the breakers; it seemed to be a tidal wave, for there was not much wind. Rapid sinking of the barometer, however, warned me to expect trouble, and also the wind and sea were gradually rising considerably.

A full fledged typhoon blew on Friday, March 29 from 7:30 P.M. on. It is impossible for any of us to describe the strength of the wind. We took [573] on deck all the anchor chains we could find on board and made moorings as necessary with the increasing wind. We saw no more of the land then, though the moon was full. One squall followed another.

It must have been about 8:30 when we began to drift; even before that, at about 8 o'clock, all the boats, the gasoline in the galvanized tanks, and all the deck ladders, the chicken house and the joiner's bench were washed from the deck by heavy waves. How and by what route we went out of the lagoon no one can say, the ship was wheeling frightfully; no one could stay on his feet. We sat in life-jackets in the saloon and awaited the worst. On deck heavy waves were hurtling across from both sides; one would have been thrown overboard immediately. Around us trees, coconuts and plants of all kinds were swirling about, some of them thrown up onto the ship. From 10 in the morning on (the 29th) the

barometer began to rise; but the typhoon continued to rage. The sails were blown out into shreds between the rudders. Only the schooner sail stayed whole. Judging from the appearance of the water we must have been already outside the lagoon at 10 o'clock; it was not possible to confirm this by sounding.

Our little ship did very well, and thanks to her exceptional seaworthiness we survived the storm. Many times the ship was thrown over 40 to 45 degrees and completely enveloped in water, but she always righted herself in a few seconds, only to be thrown over again. We used quantities of oil to calm the sea. Towards noon we realized that a great deal of water must be in the ship. The bulkhead was broken down from the saloon, and now we saw that the water was up over the machine platform. Now I ordered volunteers to the pump, for to command anyone directly would have been an outrage; the heavy waves continued to break over the deck without cease. The machine pumps could not be used, because the batteries were completely destroyed. The water had come in chiefly through the ventilators on deck to starboard. At 4 o'clock the barometer had climbed to 29. 10, the sea continued high and rough, the typhoon continued to blow in full strength. I think it can be assumed that nothing is left of Oleai, for the trees which floated by us were all very large and came from the interior of the islands.

On Saturday March 30 it was squally, but somewhat brighter. I was not able to determine the ship's position, for the sun did not come through. In the afternoon we cleared out the hold, of necessity, and found there some dry rice. At 2:30 the corpse of

a native floated close by our ship on its back. The wind now declined steadily; the barometer rose slowly. There was still a heavy sea. On Sunday at noon I held a conference with my officers, in the course of which we decided to go to Saipan or possibly to Guam. For it was not possible to get to Jap, because the current was too strong towards the northwest and we did not have enough sail surface. The engines were not damaged and possibly usable.

From April 1 to 4 we had moderate weather. At daybreak on the morning of the 4th we sighted Tenian and Agiguan. We sailed and steamed towards Garapan. Shortly we sighted Saipan. At noon we anchored with our kedge-anchor in Tanapag harbor.

14: Born et al--573 (1907) 1907 Woleaians
116, 132, 731 Woleai

On April 11 in the evening the steamer [MR: "Germania"] anchored in the lagoon of Oleai. Dr. Born came aboard immediately.

Some of the islands which I [MR: district official Fritz] saw three months ago in the full splendor of their luxurious coconut groves, are wholly destroyed; only a few trees project from the heaps of fallen ones, standing, but without their tops; not a green leaf is to be seen.

14: Born et al--573 (1907) 1907 Woleaians
116, 165, 731 Ifalik

In all 225 people lost their lives on Ifaluk and Oleai [MR: in the typhoon of March 1907]. No Europeans perished.

14: Born et al--576
116, 241, 262, 731

(1907) 1907

Woleaians
Ifalik

According to my [MR: Fritz's] unfortunately extensive experience of typhoons, only a small number of the palms will recover [MR: following typhoon of March 1907], and will not bear fruit again for two or three years. On high islands (Saipan, Ponape, Jap) the natives are not so exclusively dependent on the coconut palm for food; large stretches are planted with tuberous plants and maize; in protected places breadfruit survives the storm, usually animal nourishment is available (Saipan). But on the low coral islands the life of the inhabitants depends almost entirely on the coconut palm, the breadfruit trees break down in the storm, the taro plants are washed away. For the next few months the fallen ripe and unripe nuts, the marrow of the fallen trees, can be used, but then threatens a state of emergency.

14: Born et al--576 (1907) 1907 Woleaians
116, 157, 731 Ifalik

On April 12 we [MR: district official Fritz] arrived at Ifalik and brought the people the share of the provisions allotted to them [MR: after the typhoon of March, 1907]. But none wanted to leave their destroyed home; much more, the ruling chief turned down my proposal. All depictions of the coming distress were useless; the chief frankly and rightly feared a lessening of power with the emigration of large numbers of his subjects. But I am convinced that when after a few months bitter want strikes, the obstinacy of this gentleman will yield of its own accord.

14: Born et al--576 (1907) 1907 Woleaians
116, 167, 731 Ifalik

I [MR: district official Fritz] intend to move as many as possible of the population [MR: affected by typhoon of March 1907] to the Palau and Marianas Islands, and in fact, on the present trip of the "Germania," 200 to 300 from Ifaluk (in all over 400 inhabitants, 25 typhoon victims) to Palau, on the trip back 200 to 300 from Oleai (formerly a total of 1,000 inhabitants) to Saipan. The "Seestern" expected in July is then to visit the other islands in the east, which presumably were also struck by the typhoon, and bring as many people as possible to the Marianas.

14: Born et al--576-577 (1907) 1907 Woleaians
116, 656, 731 Woleai

On Oleai, on the recommendation of Dr. Born, I [MR: district official Fritz] appointed a Spaniard from Jap, known to me as dependable, Julio Villaçon, as deputy of the administration, and gave him the task of putting through the following measures [MR: after the typhoon of March 1907]:

The distribution of the food brought with us and requisitioned by Dr. Born from the traders.

The preparation of planting land for the seed to be brought in on the returning "Germania" (sweet potatoes, taro, and others).

Looking out for the 200 to 300 emigrants to be taken to Saipan until the return of the "Germania."

Forbidding traders and natives to buy, sell, or export copra or coconuts since all fruit on hand is necessary for food. [577]

Forbidding traders and natives from crediting goods or objects in order to prevent the people from falling into debt servitude to foreign traders exploiting their plight.

14: Born et al--577
116, 441, 731

(1907) 1907

Woleaians
Woleai

The destruction of the copra trade [MR: after the typhoon of March 1907] for the duration of several years will probably result in the suspension again of the Japanese settlements on these islands. It is a matter of the branch establishments of the Jap firm Marutani and the Saipan firm Muragama. O'Keefe also has a trading station on Oleai.

22: German Government--184 (1909-10) 1911 Woleaians
116, 167, 731 Woleai

[AN: In the Western Carolines, West Central Carolines, and Marianas] ... the peace was not disturbed in the year covered by the report [ER: 1909-10]; relations with the natives remained untroubled.

The typhoons of the last years [AN: 1905 and 1907] had necessitated resettlement of supernumerary persons from the most devastated islands of the Oleai and Mortlock groups [UMR: Nomoi], and from Pingelap and the atolls south of Palau, on the thinly populated islands of Ponape, Palau, and the Marianas; on the latter there was more than sufficient food available for them, and they were to be settled there permanently as an economically valuable addition. Disturbances on Ponape and the danger that they might become enslaved, about the end of 1908 required removal of the Mortlock natives to Saipan. Unfortunately, this transplantation did not prove successful. In contrast to the people of Oleai who are closely related to the Saipan Carolinians, the people of Mortlock could not feel at home on Saipan. In April 1910, together with their companions in misfortune on Truk, they were sent back to their own islands, which in the meantime had recovered from the damage wrought by the typhoon. Earlier the inhabitants of the southern atolls, that had been destroyed in 1905, had been resettled on Saipan; they, too, returned to Sonserol. 129 of them remain on Palau; on the Marianas there are 200 people from Oleai, 60 from Pingelap, and 64 from Samoa, who, in 1909, had to be removed from their home lands for political reasons.

22: German Government--185 (1909-10) 1911 Woleaians
116, 245, 731 Woleai

Repeated trips of the district official and the Imperial Government physician. . . to the Central Carolines and the southern islands were undertaken to investigate the present condition of those atolls and their inhabitants after the typhoons of 1905 and 1907. It was ascertained that all islands had recovered almost completely. The coconut palms bore abundant fruit; on Oleai 20,000 new trees had been planted under the direction of a minor police officer. Only the breadfruit trees do not yet bear fruit again, and the washed-out and salt-soaked taro fields on the islands that had been hit by the tidal wave do not yield any crops.

41: Bates & Abbott N-5 (1953) 1958
OR21 Woleai OR21
Ifaluk

251 Breadfruit is the only food on Ifaluk that can be stored for any length of time (they sometimes smoke fish, but not to keep it for more than a few months). To preserve the breadfruit, the skin is scraped off and the pulp cut into sections which are put into big, open-meshed rope baskets. These are carried to the lagoon, weighed down with coral blocks, and left to soak overnight. The baskets are then removed from the lagoon, covered with leaves, and left for still another night. The pulp can then be kneaded into a paste, which is wrapped in leaves and buried in the ground. The preserving process is quite comparable with that used for sauerkraut, and the stuff lasts for years. We didn't like the taste of this mar, but apparently it is nutritious enough. Considerable quantities are buried every year, insuring a food [131] supply in case of a disaster like a typhoon.

262 There are seven or eight named varieties of breadfruit, distinguished 137 by the size and appearance of the fruit, shape of the leaves, and the like. In the case of two of the varieties, the fruits have seeds, and in these the roasted seeds are used for food. They have a chestnut-like flavor and quality.

Almost as important as breadfruit were the two taros. This is perhaps doing violence to the word "taro" since it is using it to cover two similar but quite distinct kinds of aroids with edible tubers, one called by the botanists *Colocasia* and the other *Cyrtosperma*. The taro of Polynesia is *Colocasia*, but on Ifaluk both plants were about equally important. These again are anciently cultivated plants, vegetatively propagated, each with endless named varieties. The *Colocasia* on Ifaluk was called wot and the *Cyrtosperma*, pulach (the "ch" is also rendered as an "x" sort of a sound—we argued endlessly about how to spell Ifalukian words).

Both wot and pulach are aroids, that is, they belong to the botanical family that includes the "elephant-ear" plants, the Calla lilies and the Jack-in-the-Pulpit of North America. A third edible aroid, *Alocasia*, called file by the Ifalukians, was grown on the atoll, but it was considered definitely inferior to the other two and little used as food.

244 Wot and pulach were grown in low, swampy ground in the interior of the islets. The central part of Falalap was almost all swamp, and the main gardens were located there. These taro swamps occur all through the Pacific and it is difficult to know now to what extent they